



Government
Commercial
Function

RISK ALLOCATION AND PRICING APPROACHES

GUIDANCE NOTE

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1. Context

1.1 Overview

1.1.1 This note builds on chapter 8 in the Sourcing Playbook to provide more detailed guidance for departments when they are considering risk allocation in devising the commercial strategy for any contract or outsourcing initiative. Inappropriate or disproportionate risk allocation is recognised widely by government, suppliers and independent bodies (such as the NAO) as one of key reasons why government contracts underperform or fail.

1.1.2 This note seeks to provide government colleagues with some key information about the critical facets of risk allocation such that it is understood:

- *why* it is important;
- *what* they should be considering in regard to risk allocation in formulating commercial strategies; and
- how they might allocate various types of risk throughout the commercial lifecycle.

1.1.3 It is aimed at supporting practitioners in the identification of risks and development of appropriate ways in which to allocate such risks.

1.2 Contact

1.2.1 For complex projects you should consult the Cabinet Office before beginning the delivery model assessment. The Sourcing Programme (sourcing.programe@cabinetoffice.gov.uk) provides support to complex outsourcing projects in collaboration with the Complex Transactions Team (complextransactions@cabinetoffice.gov.uk).

2. What is risk allocation?

2.1 Core commercial principle

2.1.1 Allocation and management of risk is central to all commercial contracts and is one of the core commercial principles informing the approach to contracting with third parties. Each party seeks to minimize its overall risk and maximize its reward, which creates an inherent tension between contracting parties. Government can manage risk by carefully negotiating provisions to transfer or share risk with suppliers.

2.1.2 If a supplier is put in a position where they are managing an inappropriate balance of risk then the outcome is highly likely to be poor value for money (a high-risk premium will be loaded into the price), underperformance against the core contract objectives (as supplier focus increasingly shifts to cost cutting) and/or an onerous contract which could ultimately lead to its collapse.

2.2 Importance of risk allocation

2.2.1 Effectiveness and value for money of contracted services will only be achieved where risk allocation is equitable and where the party managing the risk is the one most reasonably able to do so. Departments and their advisers should be aware that the objective of risk allocation is not to transfer as much risk as possible to suppliers, but to distribute risk appropriately across the parties.

2.2.2 In the past, government has made poor decisions about how it allocates and manages risk in contracts and this has contributed towards many high-profile public sector contract failures, particularly where a party has been responsible for something out with its control. Risk allocation is crucially important to get right for the future of outsourced contracts.

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3. When is risk allocation required?

3.1 Commercial lifecycle

- 3.1.1 Departments should adopt a structured approach to the assessment of the risks in the contract early in the commercial lifecycle, so that all parties are clear as to the risks each is being required to bear and that they can make provision for mitigating and managing these risks in the most effective and economical manner.
- 3.1.2 An initial risk identification and assessment should be undertaken as part of the process of completing the outline business case and/or building the delivery model assessment (DMA) (and well before the commencement of procurement process) and the acquired information used to inform the authority’s commercial strategy.
- 3.1.3 A review of risks should then be carried out periodically as the process evolves, new information emerges and circumstances change. Risk management is a continuous process and should not be treated as a ‘one-off’ exercise in the procurement/commercial lifecycle. Risks that were identified at the outset of the procurement process or contract can and do change throughout the procurement or contract for a variety of reasons and new risks can arise which can affect the procurement or the operation of a contract. The authority, should give careful attention, if they are considering making any contract changes in relation to risk allocation once the contract is in life. Any proposed changes should be fully impact assessed and made in line with legal advice.
- 3.1.4 Figure 1 sets out the key points throughout the commercial lifecycle where risk must be considered and Table 1 describes the steps in further detail. This is further described in HMT’s Orange Book - Management of Risk, Principles and Concepts.

Figure 1: Risk within the Commercial Lifecycle

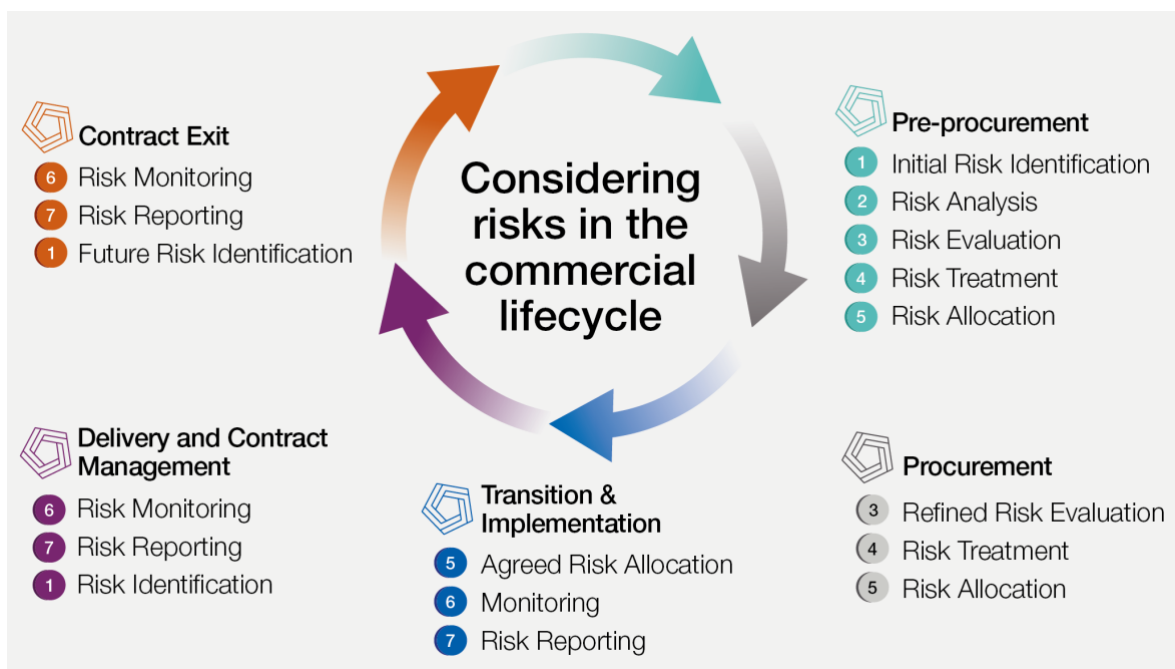


Table 1: Descriptions of Risk within the Commercial Lifecycle

Stage	Title	Description
1	Risk Identification	<ul style="list-style-type: none"> • Process of producing an integrated and holistic view of risks, often organised by taxonomies or categories of risk, to understand the overall risk profile. • Identification of the key risks that could impact delivery or users of the services and risks around service transfer on termination or partial termination. • Mapping the timing and impact in relation to these risks.
2	Risk Analysis	<ul style="list-style-type: none"> • Consider the likelihood of each risk arising. • Process of considering the nature and level of risk through use of a comprehensive risk register structured under a common set of risk criteria.
3	Risk evaluation	<ul style="list-style-type: none"> • Involves comparing the results of the risk analysis with the nature and extent of risks that the department is willing to take to determine where and what additional action is required.
4	Risk treatment	<ul style="list-style-type: none"> • Deciding whether to avoid, accept, reduce / mitigate, or transfer each risk.
5	Risk Allocation	<ul style="list-style-type: none"> • Defines which party will assume each risk, identifying which risks the supplier will be (or remain) responsible for and to what extent, and identifying which risks the department will be responsible for and to what extent. • A 'risk allocation matrix' or 'risk transfer matrix' should be developed to aid the approach.
6	Risk Monitoring	<ul style="list-style-type: none"> • Continuous process of understanding whether and how the risk profile is changing and how well each party is managing the risks¹.
7	Risk Reporting	<ul style="list-style-type: none"> • Process of providing information to defined stakeholders to enable them to decide whether decisions are being made within their risk appetite to successfully achieve objectives. • Consideration of whether any changes are required to re-assess strategy, policy and objectives.

¹ The Orange Book - Management of Risk, Principles and Concepts contains further detail on the different steps and stages of Risk Monitoring.

3.2 Risk allocation matrix

- 3.2.1 A risk allocation matrix should be developed in devising the approach to risk allocation and is indeed prescribed by the Green Book as a key component of the commercial case within any project business case.
- 3.2.2 The risk allocation matrix should be used to directly inform the proposed commercial model and pricing approach. During market engagement both before and during the procurement, the risk allocation matrix can be shared within potential bidders and bidders in order to seek their input. A high-level example of a risk allocation matrix is provided below.

Table 2: Example Risk Allocation Matrix

Risk Category	Potential Risk Allocation		
	Department	Supplier	Shared
Design Risk			
Delay Risk			
Transition & Implementation Risk			
Availability & Performance Risk			
Specific Change in Law Risks			
Risk 5			
Risk 6			
Risk 7 etc.			

4. How to ensure successful risk allocation

4.1 Allocating risk

- 4.1.1 This guidance note touches on all the three risk categories that HM Treasury's 'Better Business Cases' guidance states but focuses mainly on 'Service Risk'.
- 4.1.2 Risk can be allocated in a number of ways but typically through the pricing and performance mechanisms; and/or express provisions within the contract e.g. representations and warranties, insurance provisions, and indemnities.
- 4.1.3 For specific guidance on dealing with risk through contractual provisions such as insurance, please refer to the model service contract guidance and see table 3 below.

Table 3: Further detail on contractual provisions relating to risk

Provision	Description
Insurance	Some of the risks identified may be covered by commercially available insurances which the Supplier or Authority already hold, or should acquire for the purposes of the contract. The treatment of insurance is covered in the provisions found in Schedule 2.5 (Insurance Requirements) of the Model Service Contract.
Specific liability limits	Having established what identifiable risks may materialise in the course of the contract, and arrived at a financial scale of such occurrence, limits of liability should be set for each risk, whether or not covered by insurance. The limit for each risk should be arrived at through some rationale and explicable relationship to the assessed risk level. For example, if a particular risk event can occur in year 1 and year 3 of the contract term, then it may be logical to set the limit of liability for that risk at twice the assessed impact level.
Residual liability limits	Once the main risks in the contract have been dealt with using these steps, then any residual risk, comprising of lesser or undefinable areas of risk, can be considered. It may then be appropriate to establish a limit of liability for these residual risks. The aggregate liability limits established by undertaking the risk assessment exercise should be compared to the standard liability position summarised in the Model Service Contract guidance as a starting point. Significant variance may be considered justification to depart from the standard but legal advice should be taken in such cases.

5. Key Principles of Risk Allocation

5.1 Principles

5.1.1 Risk is inherent in everything government does in order to deliver high-quality services. The Orange Book notes that public sector organisations cannot be risk averse and be successful. It is to be expected, therefore, that successful contracting will involve government taking an appropriate degree of risk as well as transferring some risks to their suppliers.

5.1.2 Suppliers can often price and manage certain risks better (and more cost effectively) than government. There are some types of risks that suppliers are well placed to manage such as day-to-day operational delivery risk. There have, however, been examples of less successful risk transfer, especially where risks that are beyond the supplier's control are transferred from government.

The key to risk allocation is always in determining what an appropriate degree of risk looks like for both parties in order to achieve an equitable and affordable outcome for both parties that will deliver on key service objectives.

In several high-profile contracts, risk transfer has been inappropriately transferred through the pricing mechanism where suppliers were inappropriately paid on outcomes. In these scenarios, payment was linked to factors beyond their control and left the supplier exposed to the risk of not being paid for their services where the desired outcomes were not achieved.

5.1.3 One of the main drivers for risk allocation is achieving value for money (vfm). In general terms, transferring risk will promote vfm when the supplier is adding value in bearing and managing risk. Transferring risk appropriately to a supplier can create incentives for that supplier to deliver the contracted requirements to the scheduled timeframes, costs and to the right standards and conditions in an efficient way.

5.1.4 This principle is based on the theory that the party in the greatest position of control, in relation to a particular risk, has the best opportunity to reduce the likelihood of it materialising as well as ability to deal with the consequences of the risk if it does materialise.

5.1.5 This capability to manage the risk most effectively and apply an efficient price may be due to one or more of the following features:

- Greater ability to assess the risk (and associated issues or losses);

- Greater ability to negotiate with third parties and/or potential to pass through the risk to them at a reasonable or efficient price;
- Higher capacity to reduce the probability of the occurrence of a risk,
- Higher capacity to mitigate the consequences of the risk occurring and repairing the damage more efficiently.

5.1.6 When considering the risk allocation profile and the payment mechanism, be mindful of how this may impact the supplier’s ability to innovate over the term of the contract. Consult with the market in advance of the procurement process to assess whether the proposed approach is likely to restrict innovation and to ensure that the risk allocation and payment mechanism is appropriate for the term of the contract and the authority’s requirements.



5.1.7 When it is clear that a risk transferred to the supplier will result in a higher cost (because of risk premiums) than the expected potential loss if that risk were to be retained and managed directly by government, then the department should consider retaining that risk. However, it will only be fully possible to assess this if the probability of the risk occurring can be reasonably estimated and the consequences realistically measured. It is therefore crucial that a robust process is undertaken for achieving this.

Table 4: Key Principles of Risk Allocation

Ref	Provision	Description
1	Invest time and resource in understanding and evaluating risks	Successful risk transfer from the public sector to the private sector requires a clear understanding of risks, the likely impact they may have on the suppliers’ incentives and financing costs and the limits of risk transfer which are possible. Commercial arrangements should reflect where the private sector has clear ownership, responsibility and control of certain risks it can manage more effectively.
2	Responsibility for a risk should sit with the party best placed to manage it	Successful outsourcing arrangements rely on appropriately apportioning risks between government and suppliers so that the party best placed to manage the risk is responsible for them. It may be appropriate for some risks to be jointly owned and managed (or ‘shared’) by both parties.
3	Risk allocation should be equitable	Whilst suppliers must accept a degree of risk and are compensated for doing so, they should not take unreasonable or unnecessary risks that may affect their ability to deliver those services and realise their profit. Where this is the case, performance will likely deteriorate and the future of the contract, and even the supplier, can be placed at risk.

Ref	Provision	Description
4	Reputational risk cannot be transferred	Although certain risks may be transferred from government to a supplier, public perception is that the public does not always see it this way. In relation to public facing or public impacting services, the view is that government is responsible for the delivery of those services. If services fail or performance falls below acceptable levels, government will be held to account in the public's eyes regardless of the contractual position on risk.
5	Understand what you are procuring in detail and engage early with the supply market from which you are procuring	A key feature of poor government contracts has been a lack of engagement with the market early and clarity about what it is buying. Government cannot be in a position to understand key risks if it has not done this and therefore the approach to risk allocation is likely to be ill informed.

Table 5: Benefits of allocating risk appropriately

 Placing risk with the party best able to manage it should create:	 Placing risk with the party which is not best placed to manage it is more likely to create:
Better pricing from suppliers which more accurately reflects the risk they are managing	Artificially high bids from suppliers (or bids that are potentially too low for a supplier to make appropriate profit)
Fewer performance and commercial issues during the contract term	Increased likelihood of performance and commercial issues during the term of the contract
A reduced likelihood that the contract fails completely, and the supplier prematurely exits the agreement or becomes insolvent	Increased likelihood of contract failure and early termination/exit
Greater opportunity for open and honest dialogue for mutual benefit	Increased likelihood of sub-optimal dialogue and relationship with the supplier

6. Common Risks

6.1 Addressing risks

- 6.1.1 There are a multitude of risks that will need to be address through the risk allocation process depending on the service being procured and on what basis. There are far too many different risks to be able to cover comprehensively in this guidance note but some commonly faced ones include those set out within table 6 below.
- 6.1.2 These risks require careful consideration before and during contractual relationships between a supplier and department. Table 11 within appendix I of this guidance note builds further on the detail of certain important risk areas and how these should be treated.

Table 6: Table of Common Risks with key considerations regarding risk allocation

Ref	Risk Area	Description	Key Consideration
1	Data inaccuracy	Risk that inaccurate (or incomplete) data is provided to bidders during the procurement exercise leading to inaccurate pricing or solution	<ul style="list-style-type: none"> Departments should consider whether they have afforded bidders sufficient time to conduct due diligence. Where this is the case they may be able to bear the risk reasonably. Can a sufficient quality and quantity of data be provided? What processes have been followed in order to assure as far as possible data quality? Note that departments should not hold incoming suppliers responsible for errors in data, or incomplete data, where they have not been able to perform sufficient due diligence and that there should be a contractual mechanism to cater for this. <p>Further information on this risk is provided in appendix I</p>
2	Inflation	Risk that the cost of supplier's 'inputs' will rise over time due to inflation	<ul style="list-style-type: none"> Supplier will take this risk in 'firm price' approach (described at table 8), although may include risk premium to compensate for taking risk. Other pricing mechanisms include provisions to uplift prices linked to specific index.

Ref	Risk Area	Description	Key Consideration
			<ul style="list-style-type: none"> Departments should assure themselves that any index/indices within the contract are <i>appropriate</i> and that they are cognisant of the risks of specifying inappropriate indices. <p>Further information on this risk is provided in appendix I</p>
3	Performance/availability	Risk that the services will not be delivered to the requisite performance/availability levels	<ul style="list-style-type: none"> The Supplier must take this risk. Risk is allocated through the performance mechanism through which the supplier is incentivised to deliver through placing profit at risk. Departments should assure themselves that they have done sufficient work and consultation to ensure that the planned performance mechanism is proportionate, cannot be 'gamed' and does not create unintended/perverse outcomes. Departments also need to be clear on any dependencies upon them in order to enable the supplier to meet performance measures. <p>Further information on this risk is provided in appendix I</p>
4	Volume/Demand	Risk that the actual usage of the service varies from the levels forecast	<ul style="list-style-type: none"> Risk for volume forecasting should sit with the party who is best placed to manage the volume forecasting process. Is there historical volume/demand information available and to what extent can it be relied upon i.e. how accurate is it? Departments may need to consider guaranteeing a minimum volume to suppliers in order to allocate risk more equitably. <p>Further information on this risk is provided in appendix I</p>
5	Currency	Risk that the cost of supplier's inputs will rise due to fluctuations in foreign exchange rates	<ul style="list-style-type: none"> The party which bears the risk will depend on the pricing approach/payment mechanism employed e.g. in fixed and firm price contracts, assuming the department pays in sterling, the Supplier takes the risk, although may include risk premium to compensate and will benefit to the extent that the fluctuation is favourable. In a cost-plus contract, the department takes the risk. Suppliers with global supply chains may seek to mitigate their risk through currency hedging.

Ref	Risk Area	Description	Key Consideration
6	Change in Law - General	Risk that a general change in law affects the supplier's ability to deliver any aspect of the contract to time, budget and performance	<ul style="list-style-type: none"> The supplier generally takes this risk. The supplier shall neither be relieved of its obligations to supply services under the contract nor be entitled to an increase in charges as the result of the general change in law. A general change in law is one where the change is of a general legislative nature (including taxation or duties of any sort affecting the supplier) or which affects or relates to a 'comparable supply' or other contracts for the supply of similar services with other customers i.e. it isn't unique to the contract with the department. <p>Further information on this risk is provided in appendix I</p>
7	Change in Law - Specific	Risk that a specific change in law affects the supplier's ability to deliver any aspect of the contract to requirement time, budget and performance	<ul style="list-style-type: none"> A specific change in law is one that relates specifically to the business of the department and which would not affect a 'comparable' supply (see general change in law). The supplier takes this risk if the specific change in law was reasonably foreseeable at the time of entering into the contract. If the specific change in law occurs during the term of the contract then the supplier may, through the change control procedure in the contract, be entitled to an increase in charges and/or relief of obligations to provide services provided it has sought to mitigate the effect. <p>Further information on this risk is provided in appendix I</p>
8	Solution/design Risk	Risk that the services have/project has not been designed adequately for the purpose required	<ul style="list-style-type: none"> The supplier will usually have the main responsibility for the adequacy of the design of the system/solution and its compliance with the output/performance specification and in principal will take the risk. The department may, in some cases, retain a proportion of design risk in certain aspects of the system/solution, depending on how prescriptive the department is in the output specification. For this reason, it is extremely important that the specification, roles and responsibilities and dependencies for each party are as clear as possible.
9	Delivery risk (Project delay)	Risk that the design and build phase of the project runs behind the planned timescales	<ul style="list-style-type: none"> Suppliers can be incentivised to deliver projects on time through a variety of mechanisms, principally in the payment mechanism, but to the extent that the

Ref	Risk Area	Description	Key Consideration
			<p>department is involved, it must understand and manage its obligations effectively.</p> <ul style="list-style-type: none"> Where the department has obligations, the risk is usually shared and the party responsible for the delay should be responsible for it.
10	Scope change /Specification	Risk of a change in requirements or scope over the course of the project	<ul style="list-style-type: none"> This is dependent on the reason for the change in scope or specification. If the change is driven by an inadequate design, the supplier likely takes the risk. Where the change is driven by the department then it would be managed through the change control procedure in the contract. <p>Further information on this risk is provided in appendix I</p>
11	Supplier defaults	Risk of losses to the department as a result of supplier defaults e.g. data loss.	<ul style="list-style-type: none"> The contract should set out clearly which party takes the risk on a range of scenarios, including data loss, through indemnity provisions. In the model services contract, the supplier's liability in respect of certain indemnities provided under the contract is unlimited. This is either because the law states that liability cannot be limited or because a cross-government position has been taken that liability should not be limited. Liability in respect of other events is not limited, including for example, data loss and damage to authority premises and assets. Any liability cap can be expressed as a percentage of charges payable annually or over the contract term by the department The Sourcing Playbook is clear that departments should not ask suppliers to take unlimited/uncapped liabilities other than where this would not be lawful or in circumstances where a cross-government position has been taken on liability. Where the supplier is asked to take unlimited liabilities outside of these circumstances, authorities should, at a minimum, be aware of the high-risk premium that suppliers are likely to include within their charges.
12	Termination	Risk that the department will terminate (or partially terminate) the contract early i.e. before the end of the initial contract term	<ul style="list-style-type: none"> There are various reasons that a department might wish to terminate a contract early. The model services contract sets out a range of specific events which constitute 'Supplier Termination Events' and the supplier must take the risk on

Ref	Risk Area	Description	Key Consideration
			<p>these events occurring (for its default) - but not for other causes for termination e.g. where the department terminates for convenience.</p> <ul style="list-style-type: none"> • If the department terminates for convenience, they should be aware of any obligations under the model services contract to pay termination and compensation costs.
13	Subcontractor insolvency	Risk that a subcontractor within the supplier's or subcontractors' supply chain becomes insolvent during the course of the contract term	<ul style="list-style-type: none"> • The supplier must take this risk as it is responsible for its own supply chains. As set out below at point 15, failure in the subcontractor supply chain is explicitly excluded from the definition of a 'Force Majeure Event' in the model services contract.
14	Industrial action	Risk of industrial action by any of the supplier's staff	<ul style="list-style-type: none"> • The supplier must take this risk as it is responsible for its own employee relations and this is within its ability to control and a core element of service delivery. • As set out below at point 15, industrial dispute relating to the supplier's (or any subcontractor's) personnel is explicitly excluded from the definition of a 'Force Majeure Event' in the model services contract.
15	Unforeseen events (force majeure)	Risk of unforeseen events affect the supplier's ability to deliver any aspect of the contract to requirement time, budget and performance	<ul style="list-style-type: none"> • In recognition that the supplier can't be held liable for such events, this is a shared risk and force majeure provisions within the contract cater for such events arising. • Within the model services contract, the definition of a 'Force Majeure Event' explicitly excludes any industrial dispute relating to the supplier's or any subcontractor's personnel or any other failure in the supplier's or a subcontractor's supply chain

7. Pricing Approaches and Payment Mechanisms

7.1 Effective payment mechanisms

- 7.1.1 The payment mechanism is used as a means to allocate the burden of delivery risk and incentivise the supplier to deliver to time and quality. The payment mechanism and the approach to risk allocation go hand-in-hand.
- 7.1.2 The aim of the payment mechanism and pricing structure is to reflect the optimum balance between risk and return in the contract. As a general principle, the approach should be to link payment to the delivery of service outputs and the performance of the service provider.
- 7.1.3 Where a risk is transferred to the supplier, the price paid by the department reflects this and there is no adjustment mechanism if the event does occur and impacts the supplier's cost base (because it has already priced in the risk of the event occurring).
- 7.1.4 Where a risk (e.g. inflation risk) is not transferred (or not wholly transferred) to the supplier, contractual mechanisms exist to adjust the price paid to the supplier by the department by adjusting the price, or elements of the price, linked to a specified index.
- 7.1.5 To determine the most appropriate payment mechanism structure, it is necessary to understand:
- Whether the pricing applies to inputs or outputs/outcomes (along this range, there is increasing risk transfer to suppliers, their payment being increasingly contingent on results).
 - Whether the pricing applies to projects (with suppliers incentivised to deliver on time and budget e.g. by applying delay payments applied for late delivery of milestones) or for services (with suppliers incentivised to deliver expected quality by applying service credits for underperformance).

Table 7: Pricing: Input vs output/projects vs services

	Inputs	Outputs/Outcomes	Hybrid Incentivised Input & capped output
Milestones/projects	<ul style="list-style-type: none"> • Time & Materials • Cost Plus 	<ul style="list-style-type: none"> • Fixed Price • Firm Price 	<ul style="list-style-type: none"> • Guaranteed Maximum Price with Target Cost
Services	<ul style="list-style-type: none"> • Time & Materials • Cost Plus 	<ul style="list-style-type: none"> • Volume Based 	

- 7.1.6 Where the department wishes to exercise a significant degree of control over how the services are delivered, it should be responsible for managing all or most of the risks and in such circumstances adopt an input-based pricing model. This normally involves adopting a Cost Plus or a Time and Materials pricing mechanism. The pricing and supplier margins should reflect the input costs only - i.e. there is no risk premium.
- 7.1.7 Where the department considers that the supply market is best placed to determine how the services are delivered, it should specify only the outputs or outcomes it requires i.e. what to deliver. It is the supplier's responsibility to find the optimum way to deliver those outputs. In this scenario, the risks associated with delivering the supplier's solution sits with the supplier. Buyers can also expect the margins to be higher for contracts where suppliers take on the risk of delivery.
- 7.1.8 If a department is specifying an output-based pricing model and transferring delivery risk to the supplier, it should refrain from also specifying inputs i.e. how the supplier should deliver this model. There are many examples of government requiring output-based solutions and services and then specifying the inputs. This can potentially result in confusion about who is responsible for delivering the output and result in poor performance.
- 7.1.9 Table 8 of this guidance note considers the most common payment mechanisms and sets out some high level considerations, related to risk transfer, to bear in mind when constructing each payment mechanism.
- 7.1.10 Table 9 sets out some key considerations for departments to bear in mind when designing the payment mechanism.

7.2 Indexation

- 7.2.1 Where not addressed through the payment mechanism, ensure that contracts include appropriate indexation (i.e. using an index or basket of indices or measure that reflect the underlying costs of delivering the service) where the supplier is managing pricing risks outside of their control.
- 7.2.2 The right index will depend on the specific cost drivers of a contract. Developing a Should Cost Model will help to identify costs and where indexation may be required. For services where costs can decrease over time, no indexation or a negative index may be appropriate.
- 7.2.3 The index should not include any factors which the contract aims to incentivise. See Table 13 in Appendix II for further detail on indexation

“The aim of the payment mechanism and pricing structure is to reflect the optimum balance between risk and return in the contract.”

Table 8: Table of Payment Mechanisms with key considerations regarding risk allocation

Payment Mechanism Definition	Description	Level of Risk Transfer to the Supplier	Key Risk Allocation Considerations	Key Risk Allocation Considerations
Firm Price	Charges will <i>not</i> be subject to increase due to indexation	High	Supplier takes the cost risk of the resources (or input) required to deliver the services to the agreed standards/performance and/or timeframe within the firm price. It also takes the risk that inflation will be higher than that profiled within the bid price.	<ul style="list-style-type: none"> An unambiguous scope and specification is required or a high risk premium may be included. The supplier benefits where inflation is below that profiled potentially leading to poor vfm.
Fixed Price	Charges will be subject to increase due to indexation	Medium/ High	Supplier takes the cost risk of the resources/inputs required to deliver the services to the agreed standards/performance and/or timeframe within the fixed price. It does not take risk on inflation as there is a mechanism to index prices.	<ul style="list-style-type: none"> An unambiguous scope and specification is required. Contract should include an <i>appropriate index or indices</i> of inflation linked to the underlying cost of service provision.
Cost Plus	Allows for the supplier to recover all actual costs incurred for the management and delivery of the services including overheads with an additional profit margin applied	Low	Uncertainty in output definition means that the department should not seek to transfer delivery risk as it could under a different pricing approach. There is minimal/no cost risk transfer to the supplier as it is able to recover all costs incurred in delivering a service over the contract term. A degree of risk on performance can be transferred to the supplier via addition of a success fee for achieving performance outcomes.	<ul style="list-style-type: none"> Complete transparency over the supplier's cost base, actual costs and allocation of overheads is required. Department should have resources to manage the burden of assuring the suppliers costs in order to ensure that costs are appropriate and that only allowable costs are recovered. Supplier isn't incentivised to innovate or make efficiencies since payment is based on actuals.
Time & Materials (T&M)	As for cost plus but T&M is normally based on a pre-agreed	Low	There is minimal/no cost risk transfer to the supplier as it is able to recover all costs incurred in delivering over the contract term.	<ul style="list-style-type: none"> Day rates include amounts to cover staff costs and other overheads. If rates are not discounted to reflect volumes purchased, supplier may over-recover.

Payment Mechanism Definition	Description	Level of Risk Transfer to the Supplier	Key Risk Allocation Considerations	Key Risk Allocation Considerations
	rate card plus an agreed profit applied to costs			<ul style="list-style-type: none"> Department should have resource to manage the burden of assuring the suppliers costs in order to ensure that costs are appropriate
Volume Based	The amount paid to the supplier varies according to how much the service is used, typically on a price per unit basis (but can be combined with a fixed element to cover any fixed costs)	Low to High	<p>Level of risk transfer is dependent on the extent to which likely volumes (linked to demand for the service) are known/unknown and are certain/uncertain.</p> <p>Level of risk transfer is <i>high</i> where volume data is poor and therefore likely volumes are uncertain.</p>	<ul style="list-style-type: none"> Where there is significant volume risk (i.e. volumes are unknown/uncertain) suppliers may take a risk averse view and provide a unit cost appropriate for a low volume of activity – leading to poor vfm. Operation of the model requires a clear and agreed approach to measuring actual volumes. Does not provide cost certainty for the Authority or profit certainty for the supplier. Large reductions in volume from predicted levels can lead to contract instability, re-negotiation or failure Ability to price volume-based contracts is often dependent on department ability to provide accurate historic data. Where data is not accurate then there may be a high risk premium and/or potential for disputes during the term. <i>See information in appendix I for further information about the importance of data accuracy.</i>

Payment Mechanism Definition	Description	Level of Risk Transfer to the Supplier	Key Risk Allocation Considerations	Key Risk Allocation Considerations
Payment by Results (Outcome based contracting)	A variant on the volume-based payment mechanism but rather than the amount paid to the supplier varying by usage, the amount paid varies by outcome achieved by the supplier	Medium to High	<p>Level of risk transfer is dependent on the extent to which likely volumes are known/unknown and are certain/uncertain plus the extent to which suppliers are truly able to influence the outcome.</p> <p>Level of risk transfer is <i>high</i> where supplier is not able to truly influence outcomes - extent to which it can do this must be understood in detail by all parties.</p>	<ul style="list-style-type: none"> As above for volume-based contracts. There is a risk that the supplier may be incentivised to prioritise delivery of outcomes which are easier to deliver than more difficult ones If it is difficult for the supplier to influence the outcomes, they might be paid for outcomes which they did not achieve or fail to recover costs despite poor outcomes not being their fault. The requirement to demonstrate results may lead to cash flow issues for the supplier.
Guaranteed maximum price with target cost (Target Cost Incentive Fee)	Based on a 'target cost' and a 'guaranteed maximum price,' under this mechanism, there is gain and pain share between the parties depending on the extent to which there is a difference between actual costs and the target cost. The supplier is wholly responsible for costs above the guaranteed maximum price.	Medium to High	This is a variant of cost plus and can be used in similar circumstances of output uncertainty. However, it transfers some risk to the Supplier as an incentive should actual costs be lower or higher than the target cost.	<ul style="list-style-type: none"> Complete transparency over the supplier's cost base, actual costs and allocation of overheads is required Supplier is incentivised to make efficiencies, unlike under the 'cost plus' approach. The burden of assuring the supplier's costs in order to ensure that costs are appropriate and that only allowable costs are recovered is typically even higher than under the 'cost plus' approach.

Table 9: Key Considerations in the design of Payment Mechanisms

Make sure to...	Description
<p>Ensure that the level of definition of service requirement matches the level of prescription of the payment mechanism</p>	<p>Any payment event (whether for an input, service delivery or milestone completion) should have a sufficiently clear definition of the trigger for payment. Selection of the appropriate procurement route will aid the department in getting to a sufficient level of definition</p>
<p>Provide sufficient explanation and rationale for the payment mechanism</p>	<p>If the rationale for the prescribed payment mechanism is not adequately explained, or does not incentivise bidders in areas of risk that they can influence, then this can lead to suboptimal pricing submissions from bidders.</p>
<p>Ensure supplier cash flow variances are reasonable</p>	<p>The design of the payment mechanism should seek to avoid a material adverse impact on cash flow for suppliers. This does not mean that there should be no cash flow risk to the supplier, but that it should be clearly defined and agreed from the outset. Sometimes the contract structure demands up-front investment in assets that is only recovered over time, and the cash flow risk is a key incentive to perform effectively.</p>
<p>Rigorously test the proposed payment mechanism</p>	<p>Time should be built into the design phase to scenario test the payment mechanism. This can impact evaluation (if the mechanism is so complex it reduces the ability to properly evaluate bidder responses) and contract management (through creating an unreasonable burden on suppliers). Providing worked examples in tender and contract documents will reduce the risk of lack of understanding of how the payment mechanism works.</p> <p>Further information on the risk of an overly complex payment mechanism is provided in appendix I.</p>
<p>Use of risk pots and allowable assumptions</p>	<p>In developing their bids, bidders will evaluate the risks they are taking in a particular deal or transaction and incorporate within their price a value for taking those risks. Departments should have visibility over the level of risk priced into a bid and should consider use of 'risk pots' where the specific value of each risk is set out. Having visibility on each risk and the associated value should enable negotiation between the parties to ensure that the value is appropriate and proportionate. Consideration can also be given to a mechanism where the value of a specific risk can be drawn down if it materialises – with the remainder potentially shared.</p> <p>Suppliers can also price for risk in their operating assumptions within a bid. This is sometimes is less obvious if scrutinised by a department than pricing for the risk in a risk pot. 'Allowable assumptions' (set out in the model services contract) deals with this through introducing a formal mechanism whereby the value associated with a specific assumption is only released should the assumption prove to be inaccurate.</p>
<p>Reflect the delivery payment mechanism in the tender pricing schedules</p>	<p>Wherever possible the pricing matrix or model included in the tender document and evaluation should reflect the Authority's desired payment mechanism. This should enable better bidder price comparisons and also avoid surprises once in delivery. Where volumetric pricing is to be used actual or projected data should be provided and used for evaluation.</p>

8. Practical Questions for testing proposed approach to Risk Allocation

8.1 Checklist

8.1.1 This section of the guidance provides a checklist of questions that departments may find useful to ask in order to assure themselves about their proposed approach to risk allocation. This can be a useful list to provide

Figure 2: Potential questions on proposed risk allocation approach



9. Appendix I: Further Detail on Risk Areas

This section of the document expands on some of the specific key risk areas set out in table 7 and seeks to set out in further detail a description of the risk, why it is a risk to both parties and some specific factors for the department to consider when devising its approach to risk allocation.

Table 10: Detailed Examples of Risks

Data Accuracy Risk
Description of risk
Lack of appropriate data, incomplete data and/or poor accuracy of data is provided to the bidder by the department during bid phase e.g. inaccurate data related to: staff transfer (TUPE) e.g. the number and length of employment of staff, details related to pension provision, benefits packages, working practices; volume & demand information; asset data e.g. the number and condition of existing assets, complexity of changes, existing contracts to be assigned or novated to the incoming supplier.
Risk to the supplier
<ul style="list-style-type: none"> Suppliers use data provided by departments at bid stage to inform the pricing of their bid/ the contract. If data provided was incomplete / inaccurate then there is a risk that the contract price bid is insufficient to the supplier in contract life e.g. the supplier may incur higher costs in running the service than forecast. The contract price may not allow the supplier sufficient profit or even to cover their costs - making the contract onerous.
Risk to the department
<p>Where data is insufficient, there are several key risks to the department:</p> <ol style="list-style-type: none"> Bidders may request extensions to key submission deadlines on the basis of deficient data - causing timing risks. Receiving heavily caveated bids (risking non-compliance) or a no-bid decision meaning there may not then be a viable competitive procurement, reducing the number of potential solutions available. Bidders may account for inaccurate data by including a 'risk premium' in their bid price to mitigate their risk that the incurred costs will be greater than the forecast costs. The department will pay this even if this is not the case. Bidders may simply get the price 'wrong' and bid a greater price than it would have, had it been able to rely on better data.

Data Accuracy Risk

5. With a high degree of competitive tension, bidders may drop risk premiums in order to secure the business, however these risks suppliers making insufficient profit or making a loss. The supplier may seek to reduce cost by reducing performance, which may lead to higher contract administration burden, or bidders may decide to seek to partially or fully terminate the service.

Risk allocation - factors to consider

- The Sourcing Playbook states that departments should invest sufficient effort to obtain a comprehensive and detailed set of bid data, share all appropriate data, and be prepared to explain any gaps and how this will affect evaluation and / or contracting terms - e.g. providing a data room and enabling bidders to undertake a process of due diligence, query and ask for additional data. The nature of this will depend on the type, scale and route of procurement.
- Where bidders have been able to undertake sufficient due diligence and satisfied themselves as to the status of the data then departments may ask the supplier to take the risk on data accuracy. Where bidders consider that data is not complete and/or accurate then the risks to both parties as set out above may apply.
- The department may choose to warrant that the data is complete and accurate. While the authority effectively takes the risk of data accuracy, with bidders given certain rights if the warranty is breached, they should reasonably expect bidders to demonstrate that there is no risk premium associated with data inaccuracy within their bid. Departments considering warranties should seek legal advice.
- The Sourcing Playbook further states that departments should not hold incoming suppliers responsible for errors in data (excluding forecasts) where they are unable to complete due diligence. Contractual mechanisms should cover erroneous data (subject to restrictions relating to material variations under public procurement law). Any adjustments should take place no more than a year after service commencement – and less if the procurement is considered more 'straightforward.'
- Mechanisms may include a 'true up' mechanism and/or use of allowable assumptions which permit suppliers to verify aspects of a contract after it has been signed - reflecting the practical reality that it is not always possible to conduct full due diligence prior to signing nor always appropriate for this risk to sit fully with the supplier. Where a supplier can demonstrate that an assumption is inaccurate and where both parties agree there is a cost impact then the supplier can propose a change to the contract charges, subject to this not exceeding a specified cap.
- Where service provision is already outsourced, the department is dependent on incumbent suppliers to provide relevant data. An obligation to provide and maintain a 'virtual library' throughout the contract should be included in future contracts. The supplier should warrant that the information uploaded to the virtual library is accurate, complete, up-to-date, meaning at the point of re-procurement there should be greater confidence in the data.

Inflation Risk

Description of risk

Inability to appropriately recognise that inflation is a factor which will impact the cost base of suppliers; either through lack of inflationary mechanism or use of inappropriate indices within the contract.

Risk to the supplier

- Where prices are firm and include an element of indexation, the submitted bid price, could be, after actual inflation is considered, incorrect and insufficient to allow for recovery of costs.
- Where inappropriate indices are used, the submitted bid price, could be incorrect and insufficient to allow for recovery of costs.
- Lack of appropriate mechanism/use of inappropriate indices could lead to risk pricing which makes bid uncompetitive and bidders are not successful.
- Reputational damage could be caused if margins are deemed too high after applying a mechanism which leads to over-recovery of costs.

Risk to the department

- Industry may choose not to bid if the mechanisms and/or indices are not appropriate.
- Industry may include risk pricing which will increase the overall cost of the bid and erode the value to the taxpayer.
- Supplier's performance may decrease if the treatment of indexation leads to under-recovery of costs. If the supplier cannot bear losses arising from an inappropriate mechanism and exits market/becomes insolvent.
- Reputational damage could be caused if margins for the supplier are deemed too high after applying a mechanism which leads to over-recovery of costs.

Risk allocation - factors to consider

- Length of contract – the longer the contract, the more important it is to consider the impact of inflation.
- There is a compound effect of issues arising in the early years of a contract.
- Ensure that all parties understand the nature of cost base and movement of those costs i.e. staff costs as opposed to consumables costs.
- Consider the supplier's ability to manage different cost types e.g. utilities cost, wage levels
- Agree and use appropriate indices for different cost types - which reflect the nature of the actual costs.

Performance/Availability Risk

Description of risk

Risk that the performance mechanism for a contract is not appropriate or proportionate (noting that suppliers should expect there to be a mechanism by which their performance is assessed).

Risk to the supplier

- Disproportionate mechanism i.e. excessive deductions adversely impacting profitability in relation to the actual level of failure. Ultimate consequences could be a loss-making contract/insolvency.
- Wrong metrics assessed which are not linked to desired deliverables thus causing a distraction to the delivery of the contract outcomes.
- Complexity of measurement increasing the likelihood of error in reporting.
- Reputational risks of failure of key performance indicators (KPIs).

Risk to the department

- Disproportionate mechanism i.e. excessive deductions adversely impacting profitability in relation to the actual level of failure. Ultimate consequences could be a supplier's withdrawal from the contract/market and/or insolvency.
- Incorrect focus of the mechanism which does not correctly incentivise the supplier to deliver i.e. the supplier is not penalised for significant failure and the authority has paid for a service it has not received or not received to the required standard.
- Wrong metrics assessed which are not linked to desired deliverables thus causing a distraction to the delivery of the contract outcomes.
- Complexity in measurement and increase in risk of error AND increase in cost of contract overall as more resources are required to measure, record etc.
- Reputational risks of failure of KPIs.

Risk allocation - factors to consider

- At a high level, any performance regime should be simple, relevant and proportionate.
- All KPIs should align to the specific scope/specification of service and business objectives. Such measures should be meaningful and relevant and should not include things outside the supplier's control.
- The number of specific measures to be kept to a minimum; too many measures impacts on the risk profile of the overall contract and becomes too unwieldy to measure and manage (which has a cost implication for the Authority in terms of additional resource required on the contract).
- Measures must be simple to understand (with defined joint understanding), simple to measure and sensibly measurable; all measurements must be objective and not based on subjective judgement. There should be minimised manual intervention to minimise margin for error.
- Measures should be achievable where a 'good' level of service is delivered. 'Good' in this context should be considered in the same way as benchmarking provisions and should be consistent with industry norms.
- Consider a 'bedding in period' during which the KPIs do not apply.
- Escalation triggers to a termination event should be proportionate i.e. consider 'hair triggers.'
- Relief should apply when failure occurs as a result of a failure of a dependency.
- Penalties in the form of liquidated damages (LDs) or service credits should be proportionate to the value and risk of the service. Deductions should be proportionate to the contract value, capped at contract profit, not linked to revenue and should not include ratchet mechanisms which can quickly escalate to unreasonable levels of deductions. LDs should be a genuine pre-estimate of loss and the customer's sole and exclusive remedy for service failure.

Volume/Demand Risk

Description of risk

There are two main challenges associated with volume/demand risk:

1. Changing volumes change over time;
2. Availability and provision of data with enough granularity to assess timing factors e.g. seasonality

Volumes can change over the lifetime for several different reasons including:

1. Changes in policy which can either have an immediate or gradual effect on service usage;
2. Trends in service user behaviour e.g. increasing adoption of online self-service;
3. Sudden and unforeseen demand e.g. deployment of troops into or out of a location.

Data is often summarised to bidders in the form of averages. Averages can be helpful when a reasonable reference period is used but can be an issue when the reference period lacks sufficient granularity e.g.

- a) To use the average number of helpdesk calls per day could mask a peak call volume time between 0900 and 0920 each day;
- b) To use the average number of letters received per year could mask seasonal factors (e.g. tax returns) which cause peaks in particular weeks or days;
- c) To use the average number of meals served per week could mask that building occupancy is much lower on a Friday than any other day of the week.

In some cases bidders will be able to use their market experience to understand the distribution of the average. This is often not feasible and can prevent new entrants making viable first steps into the market-place.

Risk to the supplier

- The risks to the supplier will depend on the extent of the volume/demand movement, how far in advance the movement can be predicted. The impact of the risk is dependent on the pricing mechanism adopted.
- Suppliers develop their solutions, including entering into sub-contracts, based on the volumes provided in tender documents. In mature markets suppliers may have an appreciation that generally volumes can, and historically have, been variable. Without perfect foresight, or a set of consistent assumptions, provided by the department, suppliers are unable to assess the probability and extent of changes in volume.
- In entering into sub-contracts suppliers will provide the data contained in tender documents to their supply-chain partners. When choosing to subcontract work suppliers to government are increasingly doing so to small and medium sized enterprises (SMEs) recognising policy initiatives, in particular social value. Suppliers have a choice when working with their supply chain. They can either:
 1. flow down the risk of volume movement to their supply chain partners;
 2. hold the risk themselves rather than flow it down; or
 3. adopt a hybrid approach where part of the risk is transferred, and part is retained.

Volume/Demand Risk

Risk to the department

There are two primary risks:

1. Value for money
2. Service quality
 - Where either an inappropriate pricing mechanism is used the department will not achieve a reasonable value for money position. For example pricing variable services on a fixed price basis will result in the authority paying more than if it had adopted an appropriate variable pricing mechanism in the instance of decreasing volumes.
 - Service quality can be impacted by volume movements which weren't anticipated by the supplier in designing the solution. Where volume fluctuations can be predicted suppliers will build an appropriate amount of flexibility/spare capacity into their solutions. If bidders are required to rely on averages in building their solutions they will, most of the time, be over or under-resourced.

Risk allocation - factors to consider

1. Consider how much confidence the department has in the accuracy of the data provided during the procurement process
2. Consider how volume variations may occur:
 - a) as a function of customer demand;
 - b) dependent on seasonal activity;
 - c) as the consequence of a programme of change.
3. Consider how predictable the variability is:
 - a) Is there an annual, weekly, daily cycle?
 - d) Is there a known programme of work? e.g. a transition plan of estate consolidation
 - e) Is it entirely un-predictable/uncontrolled
4. If it is a service that is likely to be sub-contracted how do sub-suppliers price their services to multi-service suppliers?

There are three key provisions to manage variable volumes: Change control procedures; Contractual pricing mechanism; Due diligence and warranted data.

All provisions must work in synchronicity to ensure a coherent contractual model.

Description of risk

Contracts are formed at a point in time and the services must stay up-to-date with changes in policy, standards and legislative requirements; such changes are often not wholly predictable.

Government contracts have a broad definition of 'Law' which extends to non-legislative but mandatory guidance to which the supplier must adhere. Contracts seek to differentiate between:

1. Specific (sometimes also known as discriminatory or qualifying) change in law; and
2. General change in law.

The protections provided to the supplier vary between specific and general changes in law. The model services contract defines:

- 'Specific Change in Law' as: "a Change in Law that relates specifically to the business of the Authority and which would not affect a Comparable Supply." A Comparable Supply is defined as "the supply of services to another customer of the Supplier that are the same or similar to any of the Services"
- 'General Change in Law' as: "a Change in Law where the change is of a general legislative nature (including taxation or duties of any sort affecting the Supplier) or which affects or relates to a Comparable Supply".
- Specific Changes in Law are considered, in government contracts, to be the department's risk except where the effect of the change was reasonably foreseeable at contract signature and General Changes in Law are considered, in government contracts, to be the supplier's risk.

Risk to the supplier

- Some changes in legislation or mandatory industry standards which fall within the definition of a General Change in Law may have a significant impact on the cost of delivering the services either as:
 - A one-off cost of making a change (e.g. an upgrade to IT security systems); or
 - Recurrent costs (e.g. labour costs either as a function of labour rates, or additional time taken to perform tasks due to a new standard)
- These changes may not be predictable at the point of forming the contract.
- It is not the change in law, which necessarily creates risk for a supplier but the way in which other contractual mechanisms either compound or mitigate the impact of the change
 - Firm Price: Firm Price arrangements offer no protection to the supplier where a change in law does not fall within the definition of a Specific Change in Law since prices are held for the duration of the contract period.
 - Fixed Price: Fixed Price arrangements can offer some degree of protection to suppliers where an appropriately blended indexation mechanism is used. The key word here is 'appropriate' where headline CPI is used as the indexation mechanism this may mask or ignore movements in the cost base of the supplier due to the change in law. It is also important to note that a change in law may occur at any time whilst contractual indexation will be applied only once per year often on the anniversary of the contract commencement date. This results in a lag in cost recovery for the supplier.

Risk of change in standards/legislation

- The risk impacts not only the prime supplier but their SME sub-suppliers/suppliers. A supplier could seek to mitigate its own exposure by engaging in fixed/firm price contracts with its supply chain which mirror the terms of the contract it has with government. Many suppliers won't or can't adopt this approach as to do so would cause significant harm to SMEs in its supply chain.

Risk to the department

- **Under the terms of the model services contract, the change in law provisions allocate most risk to the supplier. The category of General Change in Law (where risk falls to the supplier) is much wider than the category of Specific Change in Law (where risk falls to the department). In addition, changes in law that would otherwise be classed as Specific Changes in Law but which were foreseeable at contract signature are excluded from the definition and therefore the risk falls to the supplier.**
- The risk to the department occurs prior to, and during the procurement process. When assessing whether to submit a bid, suppliers will assess risks that may prevent it from achieving their strategic and financial objectives. Where the balance of risk v. reward is too great prospective suppliers will not bid or will withdraw. This risk will be particularly great for SMEs since they may lack the financial resilience of larger suppliers for whom it is still a material consideration when electing whether to bid and at what price.
- Since the contract offers no protection a prospective supplier who decides to proceed with submitting a bid has two options to seek to mitigate the risk: treat or tolerate.
 - Treating the risk will see the supplier make a provision for the possible impact of changes in law within their price i.e. including a risk premium to mitigate their view of the financial risk. Due to the nature of competitive tendering it is unlikely that a supplier who seeks to fully 'treat' all risks will be successful.
 - Tolerating the risk will see the supplier make no financial provision for the risk gambling on the risk not manifesting. Most organisations, acting reasonably, will adopt a blended approach of treatment and toleration. An inappropriately treated and/or a tolerated risk may both lead to budgetary pressures for the supplier which can in turn impact upon quality of service.

Risk allocation - factors to consider

The following contractual provisions need to be designed to work in a complimentary fashion:

1. Change in Law provisions
2. Open Book Audit Rights and Benchmarking
3. Indexation
4. Contract duration

Risk of vague, incomplete, poorly drafted specification

Description of risk

The specification forms the basis of the tendered solutions offered by suppliers. The successful supplier's proposal (Part 4.1 of Schedule 4 of the model services contract) forms their costed proposition in response to the specification. If the specification is 'wrong' the solution will also be 'wrong.' A poorly drafted specification will result in solutions that fail to deliver the intentions of the department.

It is important to note that the specification extends to more than a textual description of the services. The specification includes the data which supports the specification which typically describes the volumes and locations of the services.

Risk to the supplier

The model services contract provides an order of precedence which places the supplier's solution below the specification in the hierarchy of documents/schedules. This is not uncommon and is rarely a problem where a precise and accurate specification has been drawn up and there is alignment with the purchased solution. Where a specification is unclear the following issues may arise for the supplier:

- Reputational damage caused by delivering services below, unwritten, expectations;
- Costs of entering into disputes to obtain required clarity;
- Costs of redesigning solutions or in extreme cases developing new capabilities;
- Scalability issues can be experienced where volume data is inaccurate (see volume risk).

Risk to the department

The risks that the department face are not dissimilar to those faced by the supplier but are the 'other face of the coin.'

- Services which fail to deliver intended results;
- Cost uncertainty relating to the solution and/or disputes;
- Requirement to pause the procurement resulting in programme delays whilst a less ambiguous specification is drafted;
- Procurement challenge if the specification is significantly amended during the procurement process such that other suppliers may have been interested in bidding, or if the contract is materially amended during its term to fix issues relating to an ambiguous specification.

Risk allocation - factors to consider

There are two main reasons why an ambiguous specification may exist:

- poor drafting;

Risk of vague, incomplete, poorly drafted specification

- genuine lack of clarity of the required outputs/outcomes at the point of contracting.

In any event the department is best placed to manage the risk so should not seek to allocate ambiguity to industry.

Entering into a procurement recognising that the specification has been poorly drafted is a mistake. Departments should perform meaningful pre-procurement market engagement on the draft specification to test how it would be interpreted by potential suppliers. This will ensure that tendered solutions are designed on the same basis.

This must be paired with:

- Due diligence provisions which recognise, where appropriate that suppliers cannot conduct meaningful due diligence until after signing the contract (the Effective Date under the model services contract);
- KPIs which are measurable and which suppliers can risk assess when designing their solutions;
- An appropriate payment mechanism e.g. it may be appropriate to use a cost-plus method where there is genuine uncertainty of specification when forming the contract.

Risk of Overcomplicated payment mechanism

Description of risk

Risk that the payment mechanism for a contract is too complicated or not appropriate.

Risk to the supplier

- Risk that the payment mechanism is misunderstood at bid stage impacting contract profitability.
- Risk that the payment mechanism is so complicated that additional resources are required at bid stage that increases the cost of bidding or precludes a bidder from submitting a proposal.
- Risk that the payment mechanism shifts unmanageable risk onto the supplier resulting in a loss-making contract/insolvency.
- Margin for error in calculating invoice increases which could result in under/over-charging and have a reputational impact for the supplier.

Risk to the department

- Risk that the payment mechanism, pricing pages for submission and evaluation criteria are not aligned which can confuse the evaluation process and may not lead to the most favourable result overall.
- Risk that the payment mechanism is misunderstood at bid stage impacting contract profitability for the supplier. Ultimate consequences could be a loss-making contract/insolvency.
- Risk that the payment mechanism is misunderstood at bid stage resulting in risk pricing and a more expensive contract.
- Risk that the payment mechanism is so complicated that additional resources are required within the contract leading to a more expensive price.
- Risk that the payment mechanism shifts unmanageable risk onto the supplier resulting in a loss-making contract/insolvency.
- Margin for error in calculating invoices increases that could result in under/over-charging and could have a reputational impact for the Authority.

Risk allocation - factors to consider

- The more complicated the mechanism, the greater the margin for error in terms of application and evaluation. Simplicity is best as far as possible.
- Consideration must be given to the nature of the cost base and how the payment mechanism should take this into account. For example, variable pricing against a fixed cost base would not be appropriate.

Risk of Overcomplicated payment mechanism

- The payment mechanism, pricing pages and evaluation method should all be aligned and consistent.
- Consideration must be given to the treatment for mobilisation costs for bidders and the likely impact on cash.
- Where bidders are requested or mandated to consider/embed savings or some sort of efficiency factor, this requires very careful consideration in terms of how this will drive behaviour both at bid stage and when under contract.
- Treatment of early termination – there should be consideration of how bidders might 'arrange' their costs if there are concerns around early termination provisions.
- Consider use of worked examples provided with the bid documentation and contract to enable understanding and application of mechanisms.
- Profit caps/gain share mechanisms that are easy to follow and genuinely seek to share excessive supplier profits.

10. Appendix II: Further Detail on Pricing Approaches

This section of the document expands on the pricing approaches some of the key risk areas set out in table 4 above and seeks to set out in further detail a description of the risk, why it is a risk to both parties and some specific factors for the department to consider when devising its approach to risk allocation.

Table 11: Further Detail on Pricing Mechanisms

Fixed Price
<p>Where a service is specified using an output specification, with appropriate performance measures and incentives in place, the supplier takes on the cost risk of the resources (or inputs) required to deliver the services i.e. if the costs escalate then the supplier must manage this. It also takes on the performance risk of delivering the services to the agreed standards within the fixed price. This allows the department to achieve price certainty for a defined scope and standard of service, and the price will only vary should it wish to amend the scope or standard of service.</p> <p>The key component of fixed price has to be “fixed scope”. Floating or variable scope is not suitable for fixed pricing.</p> <p>In fixed price payment mechanisms, the charges will be subject to indexation. For contracts of long-term duration departments should specify, or request and agree, the elements of the contract that will be subject to indexation during the tendering exercise to ensure transparency from the outset.</p>
Common Application
<p>Fixed price approaches are most suited to medium- to long-term agreements whereby the movement of prices as a result of macro-economic factors cannot reasonably be predicted. The specification should be well-defined and easily understood and the quantum (volume/frequency) should be known or predictable. The price for the first year or 2 years, is fixed. Thereafter the prices may be adjusted by either a direct link to published indices or a volume/scope movement +/- a stated tolerance</p>

Fixed Price

Benefits

- Relative price certainty for the supplier: Notwithstanding indexation risks, the supplier can make a reasonable estimate of the likely revenue it will generate and any margin impacts.
- Relative price certainty for the department: Since prices will move only through contract variation or through indexation, financial planning is more straightforward.
- Encourages supplier efficiency: On the basis that the price to the department can only be varied by a specific quantum, the Supplier is encouraged to maintain efficiency to keep costs at least in line with forecast (notwithstanding the inflationary impact).
- Process certainty: There is an agreed approach to inflation management from the outset, this is easy to track and agree.
- For services defined as fixed price services in the contract, the financial and operational risk for delivery of the defined services and standards is transferred from the client to the supplier

Risk Considerations

- The key risk considerations in relation to fixed price payment mechanisms relate to clarity of the specification and the appropriateness of the index used.
- The clarity of the specification is critical in underpinning price risk transfer. If the specification is ambiguous, or is not comprehensive, then it provides the supplier with 'wriggle room' once appointed to argue that certain aspects of the service were not included in the fixed price.
- The correct index must be used which reflects the nature of the service being delivered. The 'moving parts' which must be considered in relation to inflation are the indices selected the blend/ratio of indices e.g. 85% RPIx: 15% AWE, phasing. If an incorrect index is used then the level of risk transfer to the supplier may become inappropriate

Firm Price

As for fixed pricing but using the 'Firm' pricing mechanism means that charges will NOT be the subject of increase due to indexation. Firm prices should be agreed during the tender process for those specific areas of non-variability from Implementation through to service delivery.

The key component of firm price has to be "firm scope". Floating or variable scope is not suitable for firm pricing.

Common Application

Firm priced models are generally most suitable for short-term agreements, however it is possible to use Firm pricing for services within a longer term agreement where the impacts of inflation are more predictable.

Fixed Price

Benefits

- Price certainty for the department: The department has complete budget certainty for the duration of the term of service provision.
- Encourages supplier efficiency: The supplier is encouraged to maintain and/or create efficiency within the contract to maximise profitability against a predetermined revenue stream.

Risk Considerations

- The clarity of the specification is critical in underpinning price risk transfer. If the specification is ambiguous, or is not comprehensive, then it provides the supplier with 'wriggle room' once appointed to argue that certain aspects of the service were not included in the fixed price.
- Divergent price and cost relationship: If used for short term agreements cost, within a set scope, can be reasonably predictable. The more ambiguous the scope or the longer the contract period, the greater the uncertainty. The market, acting responsibly will respond to the unknowns by pricing for risk.
- Value for money: The pricing of risk is subjective and prone to error. Risk can be over-priced as easily as it is under-priced. Whilst Firm pricing mechanisms transfer all inflation risk to the supplier, they also transfer any future inflation and efficiency benefits reducing the potential vfm for a department.

Cost Plus

A cost plus mechanism is one where the payments to the supplier are calculated based on the cost of delivering the services, plus an extra amount to allow for profit (the profit paid often dependent on the percentage tendered). Costs are calculated by reference to directly incurred supplier costs (often subject to tests to determine allowable and disallowable costs). Cost Plus requires transparency over the supplier's actual, direct costs and allocation of overheads, plus an agreed margin. It should be noted that the financial management burden for Cost Plus contracts may be significant so as to ensure that only allowable costs are recovered and that cost levels claimed are appropriate.

Common Application

Cost Plus is particularly suited to first generation contracts. The mechanism allows for reasonable costs (of hours spent and materials purchased) plus a fixed fee (either monetary value or percentage) to be paid to the supplier. In certain scenarios, or pilots, where neither party can reasonably predict how the service requirements, and therefore cost, may evolve, the Cost Plus approach can work well. Since the service benefit can be offset by cost challenges, it may be appropriate to scale the pilot appropriately to constrain the impact of cost uncertainty. Milestones should be used to track operational delivery against payments made. Over time, elements of a contract can be migrated to different pricing mechanisms when requirements and delivery challenges are better understood.

Benefits

- Price and cost relationship: Since these arrangements are necessarily open book, the department has full visibility of costs. The price then moves proportionally to cost.
- Reasonableness for supplier in unknown environment: Where the specification is unclear, using Cost Plus, although it does not provide certainty, does introduce a level of reasonableness i.e. based on actuals, subject to open book, capped profit levels. The quality of materials is pre-determined and services can be flexed throughout the term of the agreement without either party taking an unreasonable, and unforeseen, level of risk.
- Removes service pressures such that the security of delivery is more assured: Since suppliers are paid against actual costs, the risk of service deterioration is reduced should costs be higher than anticipated.

Risk Considerations

- Price uncertainty for the department: contracting authorities may enjoy the flexibility that Cost Plus arrangements provide. The ultimate budget holders for the authority can experience difficulties in forecasting and maintaining appropriate budgetary control. It is very difficult to gain complete certainty on total outturn spend, although the relationship between costs and margin should be fully understood. However, as above, this does give suppliers greater flexibility to perform operationally; they will be paid for work undertaken without the restriction of a 'cap' on what is payable.
- In contrast, stifled innovation and strive for efficiencies: Since payment to the supplier is based on actual spend, there can be little motivation to introduce cost saving innovation or other efficiencies.

Volume Based Payments

A Volume Based mechanism is one where the amount paid to the supplier varies according to how much the service is used. Typically on a price per unit basis but can be combined with a fixed element to cover certain fixed costs.

Common Application

Volume-based pricing is appropriate in instances where there is:

- A defined schedule of rates
- Variable volume/demand
- Rates themselves may be Fixed, Firm or Cost Plus
- Volume bands may exist recognising economies of scale/stepped pricing increments

Benefits

- Volume risk distribution for the department and supplier: The authority pays for the volume of services actually consumed and the supplier does not have to make assumptions for how volumes, which are outside of their control, will vary over time.

Risk Considerations

- Value for money: Where volumes are unknown, or uncertain, a supplier may take a risk-averse view and provide a unit cost appropriate to a low volume of activity (i.e. no recognition for economies of scale).
- 'Cottage industries:' Supporting evidence for invoices issued to the department can require significant supporting data to be consolidated from a variety of sources and presented in a range of formats which can be very time-consuming and expensive.
- Lack of total price/cost/profit certainty for the department and supplier: Both authorities and suppliers require a level of certainty regarding the total value of agreements to ensure that budget holders and the market can make investment decisions. Estimates can of course be made based on historic volume data taking into account trends but accuracy will vary.
- Recovery of fixed supplier costs: Mechanisms need to recognise that fixed or semi-variable costs may have been incurred during mobilisation or are incurred routinely throughout the contract life and that significant changes in volume require adjustment to unit rates to allow for total absorption of fixed or semi-variable costs.

Payment by Results

A variant on the volume-based mechanism. Payment by Results as a structure is most commonly applied when the focus of outcomes is solely on the results achieved by the supplier e.g. reduced rates of recidivism for offenders leaving custody or numbers of long-term unemployed back into work.

Benefits

- Promotes focus in terms of outcome delivery: The specific focus of this mechanism is the delivery of results which should, broadly, be compatible with the departments (unless this focus becomes misdirected, see below).
- This mechanism can be innovation-generative when structured correctly because suppliers are very well incentivised to deliver.

Risk Considerations

- Misdirected focus of service provision: Although the overall focus of service is on delivery of results, the emphasis may not be as intended. If payment is made based on results, suppliers will focus their attention on outcomes which are more likely to result in payment which may not be aligned to the intention of the department.
- Burden of proof on actual achievement of results: The demonstration of actual results can be difficult to prove, subject to subjective opinion and hard to document. There can be difficulty in establishing direct correlation between service quality/outputs and 'measurement of results' e.g. as was the case for supplier owned Community Rehabilitation Companies in relation to re-offending data.
- Cash management issues: The requirement to demonstrate results before payment is made can introduce significant cash flow issues for suppliers and could introduce additional cost of capital charges to departments.
- Lack of appeal for SMEs: Due to likely payment structure and delay in cash receipts, this structure is unlikely to appeal to SMEs who are not likely to be able to afford to fund operations up to the point of payment.

Guaranteed Maximum Price with Target Cost (GMPTC)

Under this mechanism, bidders bid a target cost for delivery of milestones or services and a margin. The target cost and the margin are together referred to as the target price. A guaranteed maximum price is set which is a specified percentage above the target price or target cost (10% above target price in the model services contract).

Where the supplier's actual costs are less than its target cost, the savings made are shared with the department and the effect is an increase in margin achieved by the supplier. Where actual costs are greater than the target cost, the difference between the actual costs and the target cost is shared equally provided that the most the department will pay is the guaranteed maximum price. This has the effect of reducing the margin achieved by the supplier.

Common Application

This model can be applied when outputs are known but delivery methods are not firm/defined.

Related models are also used where it is believed that changes to ways of working, or output requirements, will deliver significant efficiencies but the service quality risk attached to a wholesale movement to a new way of working is considered too great by the department.

Benefits

- **Transparency of cost:** Open book accounting is necessitated through the application of the mechanism thus providing transparency of costs. Open book provisions should be as simple as is reasonably possible to achieve the required transparency objectives. The ability to fix an overhead percentage during the bid which carries into the open book process may simplify reporting.
- **Sharing of cost increase risk and savings benefit:** The shared impact of both cost increases and savings benefit can help to form a true partnering relationship as both parties are incentivised to identify cost savings. The mark-up applied by the supplier can be treated as a percentage or as a fixed cash value. The fixed cash value approach reduces the risk of margin dilution for the supplier in the event that costs decrease but would dilute margin returns where the Supplier is ineffective in managing costs.

Risk Considerations

- **Uncertainty of cost for both the department and supplier:** Subject to the overall cap for the department, there is uncertainty for the authority in terms of outturn cost. There is greater uncertainty for the supplier as, although there is an element of pain sharing up to the maximum cap, any costs above the cap are the responsibility of the supplier.
- **Complex measurement:** Supporting calculations for qualifying costs (as defined as a Target Cost) can be complex as can calculations around gain share and pain share.
- **Cottage industries:** Supporting evidence for invoices issued to the department can require significant supporting data to be consolidated from a variety of sources and presented in a range of formats which can be very time-consuming and expensive.



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